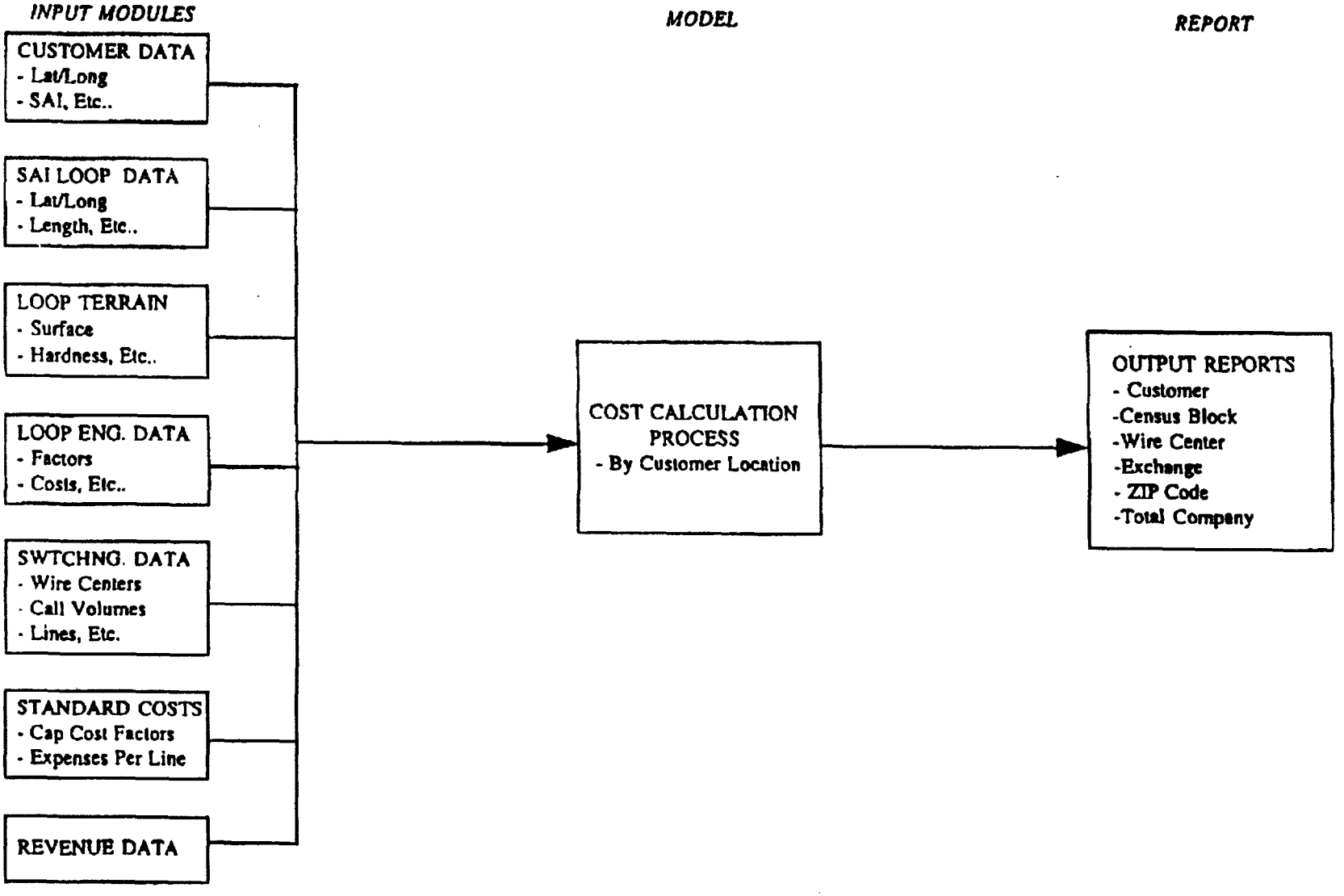
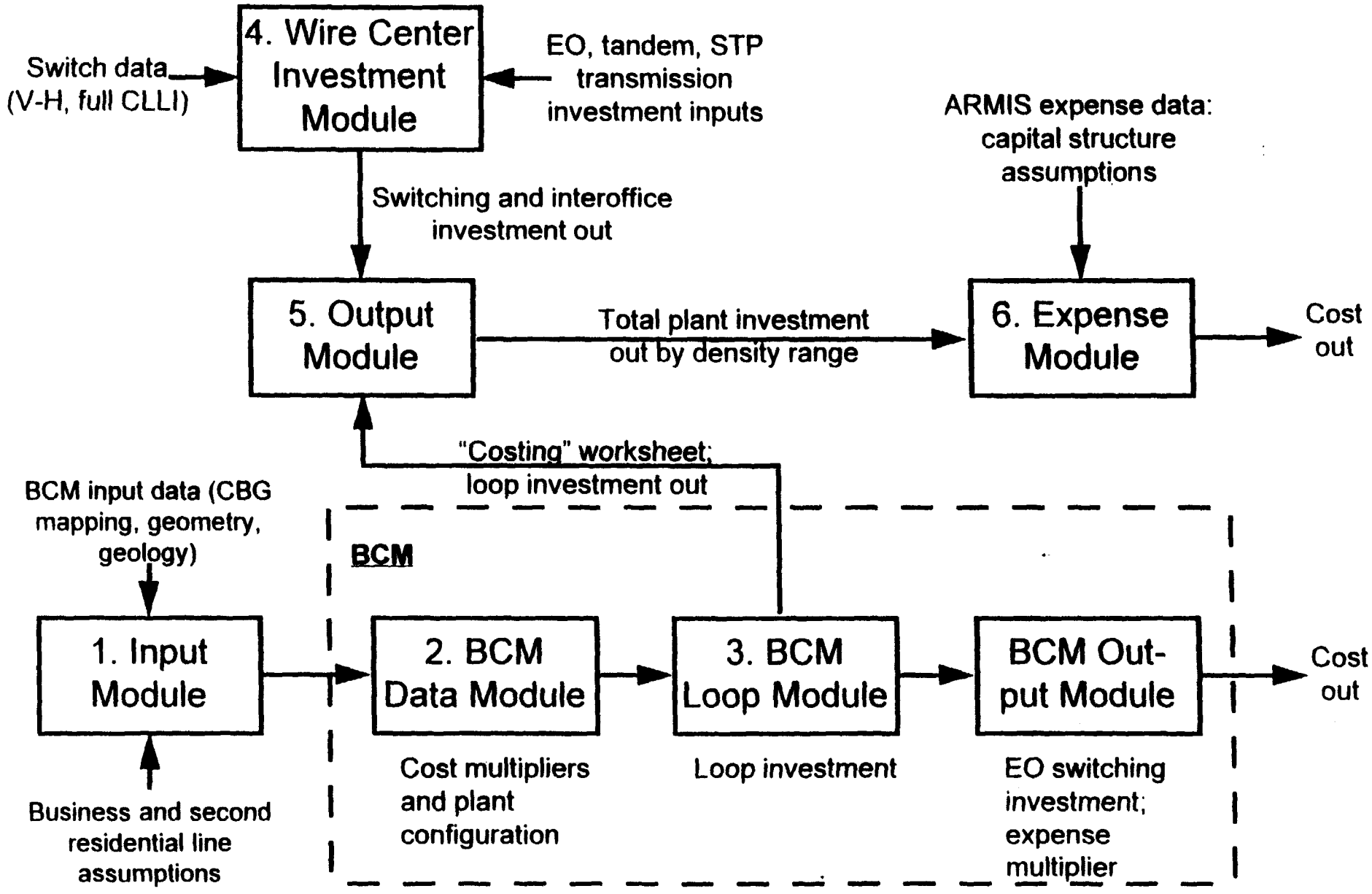
COST PROXY MODEL OVERVIEW



Hatfield Proxy Model Functional Block Diagram



ATTACHMENT 2.2

CHAPTER 3

DRA'S POSITION AND RECOMMENDATIONS ON THE PROXY COST MODEL

1. On February 21, 1996, ALJ Wong issued a ruling listing 10 questions on the issue of proxy cost model and 3 questions on other universal service issues to be addressed in the evidentiary hearings in this proceeding. This ruling was issued after the first set of workshops in February 1996, which included presentations and discussions of HPM and CPM.[1] No agreement was reached on the model structure, inputs, assumptions, and cost components at these workshops. The ruling indicated the need to address the "... the structure and development of a proxy cost model in its entirety." In this chapter, DRA will discuss the ten issues, as listed in the February 21, 1996 ALJ's Ruling, relating to the proxy cost model. Furthermore, DRA will present its position and recommendations regarding the proxy cost model. DRA's responses to the ten issues are listed in the order of DRA's development of issues.

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1. First set of workshops were conducted from February 1 to February 8, 1996. One of the four objectives of these workshops was to have a consensus model that would provide an estimate of the costs to provide basic service to all areas in California. California. The second set of workshops was held on March 4 & 5, 1996. At this second set of workshop, Commissioner Knight expressed disappointment that parties in this proceeding were not able to reach any consensus. Subsequent to the second set, DRA notes that there were numerous other meetings/workshops held at Pacific's facility.

I. [Q.1][2] What proxy cost model, if any, does the party recommend the Commission adopt, and why should that model be chosen over competing models?

2. DRA recommends that the Commission adopt the CPM over the HPM for several reasons:

- o Ease of use and usefulness of CPM over HPM.
- o CPM model inputs and assumptions are more easily verified than HPM.
- o CPM uses more California-specific numbers than HPM.

A. Ease of Use and Usefulness

3. Even though both HPM and CPM have certain difficulties for a novice user of the model, the CPM is easier to use than the HPM. DRA had an easier time understanding the flow of inputs and assumptions through the various calculations of different modules of CPM versus the more complex module framework of HPM. Based upon meetings and workshops with sponsors of the two models, DRA understands that most of the inputs and assumptions can be changed in CPM while HPM has certain inputs that cannot be changed in the BCM portion of the HPM. DRA believes that these limitations make the CPM superior to the HPM. In addition, CPM is available at the Commission office while HPM is available at AT&T's facility. The Commission does not have the necessary computer resources to operate and utilize the HPM on Commission premises.[3]

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2. Q.1 refers to question 1 of the ALJ's Ruling, and Q.2 refers to question 2, etc.
3. DRA understands that HPM requires a Pentium Processor running at least 133 Megahertz with 128 megabytes RAM, 1 Gigabytes Hard Disk Drive, internal 4X CD-ROM Drive, and tape backup unit. A 133 Megahertz Pentium is needed to have reasonable processing run times. [Source: BCM review course material.]

B. Verifiability of Inputs/Assumptions

4. DRA is, of course, concerned that both HPM and CPM have some inputs and assumptions that are proprietary in nature. DRA believes that this restriction limits the ability of parties (non-Commission, CACD, and DRA staff) to verify the total array of inputs and assumptions. However, DRA was afforded the opportunity to verify most inputs and assumptions of CPM while it was not able to verify certain inputs and assumptions from the HPM. For example, HPM assumed $40 as a cost for the "drop" portion of the outside plant network. The source of this data was a New England Telephone cost study entitled "1993 New Hampshire Incremental Cost Study". DRA examined the source for the drop and was not able to determine how the $40 drop cost used in the study was developed. DRA recognizes that HPM used the $40 drop because it was "publicly available" but DRA requested the basis for using $40 as the cost of the drop in California. Further, the original BCM did not consider the cost of the drop as part of the outside plant network. However, Hatfield incorporated this amount as part of the extension to BCM but did not explain why this amount is reasonable for California operations.

5. Another example is the switching cost data used in the HPM. DRA requested in a data request that Hatfield "provide all details (e.g. date of conversation, name of manufacturer, name of representative, telephone numbers, switch components ... under what terms and conditions, etc.) to this proposed purchase price" of about $6 million. Hatfield responded that "[t]he switch investment estimate was in large part based on informal conversations with a person from a major switch manufacturer; however, because that person requested his name and company not be divulged, HAI [Hatfield] also relied upon conversations which occurred over the years with various vendors and local exchange carrier personnel who are involved in switching and end-office

operations and procurement." [4] Therefore, Hatfield has not provided any record to support these telephone conversations. On April 3, 1996, Hatfield informed the parties that it revised its switching costs. Nevertheless, Hatfield indicated that the new and latest switching cost inputs were to be used as a "place holder"; however, no further supporting details regarding this revision have been provided.

C. California-Specific Numbers

6. DRA believes that CPM incorporates switching and loop costs that are more reflective of a telecommunications network in California than HPM. For example, HPM initially did not include all the components of a telecommunications network necessary to estimate proxy costs for basic service in California. The components of a telecommunications network not included are, among others, the costs for drop, SAI, and terminals. Recently, Hatfield included the costs for these three items as part of the "enhanced" portion of the HPM, and not part of the Loop Module of the BCM.[5] Further, as discussed in paragraph 4 above, drop cost, along with SAI and terminals, are not supported by factual documents nor were these subsequent changes reflective of costs which are representative of operations in California.

7. DRA understands that Pacific uses its own data for the majority of the inputs and assumptions since the specific data from other LECs in California was not readily available. [6]

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4. AT&T March 29, 1996 response, Answer #4.

5. The Loop Module calculates the loop investment adjusting for installation difficulty to terrain and cable sizes.

6. DRA understands that GTEC was suppose to provide data/concerns/corrections relating to the inputs and assumptions of the CPM and HPM to both Pacific and AT&T/MCI. As of April 12,

(Footnote continues on next page)

Nevertheless, Pacific's inputs and assumptions are still more reflective of a telecommunications network in California. However, DRA recommends that CPM can be adjusted, if necessary, to accurately reflect specific investment and costs for other LECs in California. DRA will comment in detail on this issue in section III in response to question # 3 from the ALJ's ruling.

II. [Q.2] Describe how the proxy cost model is structured, and the type of cost inputs it considers, and the reasons for including or excluding those cost inputs. Describe the number of copper pairs provided to each residence, and the rationale for subsidizing more than one pair.

A. Structure of Models

8. Both Pacific's CPM and AT&T/MCI's HPM attempt to estimate the cost of providing basic service in California. DRA believes that the sponsor of each model will discuss the structure of the model, its cost inputs, and assumptions in detail in its opening testimony, to be filed on April 17, 1996. Therefore, DRA will not repeat the descriptions of the structure of the two models, inputs, and assumptions.

(Footnote continued from previous page)

1996, GTEC has not provided any information to either party. Further, DRA requested similar information from GTEC and such information was not provided to date. However, in a telephone conversation between DRA and GTEC on April 11, 1996, DRA understands that GTEC is completing its analysis of the two models and will present its findings and conclusions as part of its opening testimony.

B. Number of Copper Pairs

9. Based upon a telephone discussion with Pacific's engineer, DRA understands that Pacific's standard engineering practice in Pacific's service territory is to have two copper pairs (two access lines capability) of drop in buried plant and one pair in aerial plant going to each residence subscriber. However, in newer expensive housing developments the number of copper pairs in buried plant to some subscribers may be as high as five, rather than two copper pairs. Nevertheless, Pacific assumed a single copper pair (one access line) in the CPM model for the buried drop to a residence subscriber.[7] DRA recommends that the costs associated with 2 copper pairs (two access lines) for drop in buried plant (along with underground plant) be changed to about half in the CPM model. This would spread the cost of the drop plant over 2 copper pairs for drop in buried plant per residence subscriber. In its reply testimony, DRA will provide the incremental cost difference of using two copper pairs versus one copper pair in buried drop for majority of residence subscribers.

III. [Q.3] What assumptions does the proxy cost model make, and does the model rely on company specific cost data or more generic cost data?

10. DRA expects that the sponsors will discuss all assumptions and inputs that were included in their models. DRA understands that Pacific's CPM relies primarily on its own company loop and switching costs, while HPM relies primarily on a New England Telephone cost study for its operations in New

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7. Pacific's mix of buried and aerial distribution cable is about a 3 to 2 ratio in lower density zones and a higher 9 to 1 ratio of buried (along with underground) to aerial distribution cable in higher density zones. Therefore, Pacific has more residence with two copper pairs for drop than a single copper pair.

Hampshire, undocumented conversations, and a McGraw-Hill publication entitled "U.S. Central Office Equipment Market--1994". DRA recognizes the difficulties that both INDETEC and Hatfield had in collecting data from LECs in California. [8] DRA also understands that both INDETEC and Hatfield are willing to update data to reflect California operations.[9] Since DRA is recommending that CPM be adopted, DRA believes that certain loop and switching cost inputs could be updated to reflect cost data that is representative of LECs in California to estimate the cost of basic service. At this time, DRA is not able to determine which investment and cost inputs, if any, have to be adjusted since no other LECs have provided any information to DRA. Therefore, DRA focuses its report on specific recommended changes of certain inputs that should be adopted by the Commission.

A. CPM's Assumptions

11. DRA recommends the following additional changes be considered by the Commission for the CPM model:

- Use of design utilization factor for feeder plant and pair gain systems.
- Use of fiber plant for feeder plant greater than 12,000 feet.
- Use of switch costs that reflect higher discount

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8. In a March 11, 1996 response, Hatfield indicated that "they did not claim that the values in the HPM are necessarily the absolute best." Further, Hatfield stated "[t]hey are, however, the best available." DRA questioned whether data from a small LEC (New England Telephone), done for New Hampshire state, a state that is a small size of which has a different climate from California, is appropriate and comparable for California operations.

9. Not all data inputs can be changed in the BCM portion of the HPM.

a. Utilization Factor Recommendation

12. DRA recommends that Pacific use the design utilization factors for feeder and pair gain systems for several reasons. First, DRA believes that Pacific should use the same factors as being used in the OAND proceeding. Second, the proxy cost modeling is performed for "forward-looking" technology and reflects the total number of access lines in California. In other words, the proxy cost subsidies will be based on the total number of access lines in service as of the date of the modeling. Third, the LECs' present networks were mostly constructed prior to the introduction of toll and local competition, so that the LECs had less incentive to efficiently design and build their networks. Therefore, the embedded network is based on an inefficient network resulting in a lower utilization. DRA will provide the incremental impact for this change by density zones in its reply testimony.

b. Fiber Plant Recommendation

13. DRA recommends that the fiber feeder length assumption in CPM be changed to reflect that fiber be considered only for feeder plant greater than 12,000 feet, not 9,000 feet. DRA recommends this fiber feeder length of 12,000 feet for two reasons. First, DRA examined Pacific's documents supporting a fiber cut-off at 9,000 feet. The reason stated in the various studies for the 9,000 feet cut-off was for "loop broadband planning."[10] DRA is concerned that the cost of basic service should not be used to subsidize the development of broadband services. Second, GTEC indicated in a meeting that it currently places fiber in feeder beyond 12,000 feet. Apparently, the BCM considers "digital loop technology whenever the total feeder

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10. In a April 11, 1996 telephone conversation, Pacific's engineer indicated that a 9,000 feet cut-off to install fiber for feeder plant ~~is~~ may or may not feasible for Plain Old Telephone Service.

length exceeds 12,000 feet."[11] The incremental impact for this change by density zones will provided in DRA's reply testimony.

c. Switch Costs Should Reflect A Higher Discount

14. DRA recommends that Pacific use the lower switching costs for DMS-100 and 5-ESS switches. DRA examined the vendor's prices for these switches and the SCIS model's calculation for the various inputs used in the CPM.[12] Pacific did not utilize the maximum possible discounts available for the "forward-looking" technology for both switches Instead, Pacific weighted the switch price for each switch by factoring a lower discount amount for additions due to growth. This procedure by Pacific is not appropriate since DMS-100 and 5-ESS capabilities are assumed to be available for all subscribers in California because of the introduction of competition and because growth in access lines in California assumed in the proxy model will be very little in the near term. In a normal replacement program, DRA agrees with Pacific's assumption that additions should be considered over time but for proxy cost purposes the assumption is that these switches will be available to provide the service as part of a "forward-looking" technology. DRA will provide the incremental impact for this change in its reply testimony.

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11. Hatfield's March 11, 1996 "A Discussion of Input Assumptions Used in the Hatfield Proxy Model". However, in a December 1, 1995 filing with FCC relating to CC Docket 80-286, loop technology is "[a]nalog copper technology for feeder plant, where the total loop length is less than 12,000 feet." Therefore, digital fiber technology is considered in BCM when total loop length is more than 12,000 feet.

12. SCIS is Switching Cost Information System developed by BellCore. SCIS calculates, among others factors, line termination investment using vendors' prices.

B. CPM Cost Data

15. DRA recommends the following changes in cost data for the CPM model:

- o the CPM should be updated to include relevant Pacific and GTEC data as adopted in the OAND proceeding;
- o LECs' 1994 ARMIS should be used to develop other LECs' expense estimates;
- o the PI model should be used to develop the amount of shared and common costs allocated to basic services;
- o the model should include rearrangement costs that are associated with serving the entire quantity of basic service, not those associated with serving new customers; and
- o the non-recurring costs should be treated as a shared cost.

a. Operating Expenses

16. Pacific developed the operating expense estimates in its OAND cost studies (OAND-P) and applied the relevant data to its CPM. In the OAND-P, Pacific made two types of adjustments to its 1994 operating expenses. First, Pacific normalized those that do not represent average year expenses. Pacific also adjusted certain expenses in order to reflect expenses that are associated with the forward-looking technology. The adjusted 1994 operating expenses were then used as surrogates for the forward-looking expense estimates. DRA has reservations as to whether these adjusted 1994 expenses fairly reflect operating expenses for the forward-looking technology. DRA raised similar concerns in its opening comments submitted in the OAND proceeding on April 3, 1996.[13] DRA recommends that, to the extent that there is linkage between the CPM and the OAND cost studies, the

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13. Opening Comments of DRA on Round I & Round II Cost Studies, at page 18-20.

CPM should be updated to include relevant Pacific and GTEC data as adopted in the OAND proceeding.[14]

17. In estimating other LECs' operating expenses, Pacific obtained the ratios between its total operating expenses (net of depreciation) and those of other LECs' by using 1993 ARMIS reports that LECs filed with the Federal Communications Commission (FCC). Pacific, then, applied these ratios to its expense estimates to derive specific LEC expense estimates. The methodology Pacific developed uses information that is readily available. The simple ratio captures the cost differences due to different corporate structures and different economies of scale and scope of various LECs. DRA deems the methodology used by Pacific to develop other LECs' expense estimates reasonable except for GTE of California (GTEC). DRA will explain the applicability of GTEC's specific data in Section VI. DRA recommends that Pacific's methodology in developing other LECs' expense estimates be further improved. Instead of using 1993 ARMIS reports, DRA recommends that LECs' 1994 ARMIS reports be used in developing the expense ratios since the data are more current and comparable to those used by Pacific for its own expense estimates, and they are also readily available.

b. Shared and Common Costs

18. In the OAND-P, Pacific conducted an account-by-account analysis and allocated the shared costs into sixteen family buckets. Through this account-by-account analysis, the OAND-P also identified the total common costs to be recovered by all services. In allocating the shared and common costs to basic service Pacific initially used the allocation factors that were developed in its Profitability Information (PI) Model. The PI is

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14. Pursuant to the March 25, 1996, Assigned Commissioner's Ruling, the Commission intends to issue an interim decision resolving issues relating to Pacific's and GTEC's Round I and II OAND cost studies by May 22, 1996.

one of the computer models used by Pacific in the Implementation and Rate Design phase (IRD) of the New Regulatory Framework (NRF) proceeding. The PI is used by Pacific to identify the profitability of services. The PI uses objectives, such as investment, volumes, revenues, wages, head-counts, etc., to assign a proportionate amount of shared and common costs to various services. The PI recognizes costs by category and not by family. Therefore, irrespective of the shared costs that have been assigned to various families in the OAND-P, the PI re-allocates these shared costs. (Table 3.1, Attachments to Chapter 3)

19. In the updated CPM outputs, Pacific deviated from its PI application for two of the sixteen family buckets. Pacific asserts that assigning the costs of these two family buckets to only services in the families are more reflective of cost and causation. These two deviations result in an [...] increase of shared costs allocated to basic service. (Table 3.1) DRA finds it unreasonable that Pacific simply picked two family buckets and re-allocated their cost to services within the family without applying the same allocation objective to the remaining fourteen cost families. DRA recommends that Pacific's alternative allocation proposal be rejected. The PI has been used by Pacific for internal purposes and for generating monitoring reports to the Commission. Application of the PI to determine a proportionate amount of shared costs to be allocated to basic service for recovery is reasonable and sufficiently reliable.

c. Rearrangement Cost

20. The OAND-P identified rearrangement costs of [.....] per access line per month. The [.....] captures the costs for rearranging existing plant to serve new and existing customers to save capacity. The appropriate treatment of the rearrangement cost has not been determined in the OAND proceeding. The CPM includes the [.....] rearrangement cost as part of repair and maintenance costs to reflect its stand-ready-to-serve obligation.

DRA disagrees with this treatment. The CPM estimates the cost of basic service using forward-looking technology for the entire quantity of the service. Therefore, the CPM should include rearrangement costs that are associated with serving the entire quantity of the service and not those associated with serving new customers. DRA recommends that the Commission require Pacific to segregate rearrangement costs between serving the entire quantity of basic service and serving new customers. DRA also recommends that the Commission include in the CPM rearrangement costs that are associated with serving the entire quantity of the service only.

d. Non-Recurring Cost

21. Using a [.....] location life, the OAND-P estimated [.....] per line per month for the non-recurring cost. The CPM * uses this figure less the current non-recurring charge to derive a projected non-recurring cost of [.....] per line per month. The recovery of non-recurring costs can be considered either in the monthly recurring rate or in the one-time non-recurring charge. Therefore, DRA recommends that non-recurring costs be treated as shared costs for which recovery is a pricing issue and to be determined by the incumbent LECs.

IV. [Q.6] What are the fundamental differences between the HPM and CPM models, and can those differences be resolved or must a policy determination be made?

22. DRA believes that each sponsor of the individual models will provide testimony discussing the fundamental differences between the two models. However, besides recommendations mentioned for the CPM model in paragraph 11 in this chapter, the following will identify what DRA views as on the fundamental differences between the two models:

- Pacific attempts to use a sampling method to determine loop length and therefore loop investment. A sample of 1200 loops was extracted from a data base to determine

the location of various components of the outside plant facilities. For the same 1200 sample, an air to route mile ratio (air mileage over sample cable length) was developed to use for each individual census block group (CBG). The HPM is based upon a more geometric calculation rather than any sampling of the outside plant. Therefore, there is a possibility of either underestimating or overestimating the loop length associated with the HPM.

- Each CBG is assumed to be assigned to a wire center. In the initial meetings, Pacific expressed concerns that HPM did not include over 190 central offices. Even though Hatfield corrected the problem, DRA is concerned about the possibility of misassignment of central office with a CBG in determining proper length in both CPM and HPM.

- Some of the cost inputs for the CPM come from the OAND cost studies while other costs for the OAND proceeding come from the CPM outputs. On the other hand, HPM has no connection (nor consistency) with the cost estimates in the OAND proceeding.

- Some of the modules (part of the original BCM) in the HPM cannot be changed to include items that are a part of the outside plant network. The original developers are refining the original BCM to allow variation in some of the input assumptions. DRA understands that BCM has a list of modifications that are under consideration.[15] DRA compliments the sponsors[16] of the model for considering these improvements, but unfortunately, these modifications, if implemented, will not be completed before June 1, 1996. Some of the modifications will address some of the criticisms of BCM, however, other DRA recommended modifications, as discussed in this chapter, will make CPM more adaptable to changes of investment and cost data in the various modules.

- Pacific used the 1994 maintenance repair amount to calculate the "forward-looking" maintenance repair cost. DRA needs further information to verify whether this maintenance repair estimate fairly reflect costs associated "forward-looking" technology.

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15. February 21, 1996 Ex Parte communications to FCC by U.S. West relating to Docket 80-286.

16. The sponsors of BCM are MCI Telecommunications Corporation, The NYNEX Telephone Companies, Sprint Corporation and U S WEST Inc.

23. DRA believes that most of the model differences can be resolved by parties (if the parties are willing). However, it is DRA's impression that these issues will not be resolved by parties since the preliminary cost level estimates for basic service as calculated by CPM and HPM are over $1 billion apart and therefore the Commission must adopt CPM and require Pacific to make DRA's recommended changes discussed throughout in this chapter and summarized on page 2 of Chapter 2.

V. [Q.4] What are the cost differences associated with providing customers the choice of flat or measured rate service, and the technical feasibility of providing that choice?

24. DRA is not aware of any technical difficulty in providing flat or measured rate service at this time, but may comment further on this issue in its reply testimony. On the issue of costs, both Pacific and AT&T/MCI are improving their models in order to identify costs of 1MR and 1FR separately. According to Pacific, its preliminary outputs show 1MR having different average loop lengths, but the impact of different loop lengths on costs is small.[17] However, due to the rate difference between 1FR and 1MR, the subsidy amounts are greater for measured service.[18]

25. In the OAND-P, Pacific identified the usage cost difference between 1FR and 1MR at less than [.....]. However, their monthly tariff rate differences, including end user common line charge (EUCL) for Pacific and GTEC, are $5.25 ($14.75 and $9.50) and $7.25 ($20.75 and $13.50), respectively. The 1FR and 1MR are comparable services. ~~[The Commission recognizes that a favorable~~ pricing policy for measured service should not be maintained in the long run. ~~In D.94-09-065, the Commission stated the following~~:

Due to the cost difference between 1FR and 1MR service, the subsidy amounts will necessarily be greater for measured service. DRA agrees with the Commission that the 1MR rate must move closer to the 1FR rate in order to equitably reflect the actual cost difference.[18a] DRA will put forward testimony in the OAND proceeding addressing this issue. Nevertheless, the ~~substantial~~ discounts for 1MR will require a larger subsidy for purposes of providing Universal Service.

17. March 26, 1996, Pacific response to DRA's verbal data request.
18. Id.

18a. D.94-09-065 at p.47.

~~Measured rate service is available to all residential~~ customers, regardless of their income level. The discounts from flat rate service charges make measured rate service a practical alternative for residential customers who do not find flat rate service economical for their particular needs. Measured rate service may also appeal to customers of limited means who do not qualify for ULTS. We will retain measured rate service at a price attractive to consumers, but will increase the monthly rate so that the price for the service captures more of its costs. (At 47.)

With the high cost voucher fund in place, DRA believes that it would be appropriate to move the 1MR rate closer to the 1FR's in order to equitably reflect their cost differences. Continuing the substantial discounts for measured service will require a larger subsidy. DRA will discuss in detail its subsidy mechanism ~~proposal for both 1FR and 1MR in Section VII of this report~~.

VI. [Q.8] What relationship is there, if any, between the cost data used for the proxy cost model, and the cost data prepared for the Open Access and Network Architecture Development proceeding?

26. In review of the HPM, the ~~two~~ common link~~s~~ between the HPM and Pacific's and GTEC's OAND cost studies ~~are~~ is the use of LECs' 1994 ARMIS reports as a starting point for the development of expense estimates~~, and, purportedly, the use of LECs' Commission authorized rates of return to estimate capital carrying costs~~. The HPM does not use any outputs from either the OAND-P or GTEC's OAND cost study (OAND-G).

27. A comparison of the CPM and the OAND-P shows that while the two are independent cost studies, they are dependent on each other. Independently, the CPM develops the cost of the loop on a per foot basis. The OAND-P develops and identifies other costs, such as support investment capital cost, operating expenses, directory, operator service, usage, white page listing, shared and common costs, and many more. Dependently, they use each other's relevant outputs to derive the total cost of service. The CPM did not use any of the outputs from the OAND-G. A comparison of the CPM's estimates of GTEC's costs and costs

identified in the OAND-G shows a significant difference. (Table 3.2.)

28. The OAND-P and OAND-G develop TSLRIC costs for various basic network functions and services based on company-specific costs. The results of these studies provide a means of verification of the reliability of the proxy cost model adopted by the Commission. The Commission intends to issue an interim decision resolving issues relating to Round I and II OAND cost studies by May 22, 1996.[19] DRA recommends that the Commission include in the CPM relevant cost data from the OAND cost studies it adopted. This proposal also meets the Commission's expectation that the "proxy cost model should closely reflect actual costs without having to develop all of the cost data necessary for cost studies of each individual LEC."[20]

VII. [Q.9] Should the Commission consider offsets to the results of the proxy cost model, and if so, what offsets should be considered?

29. DRA's recommended offsets to the results of the proxy cost model are directly related to its subsidy mechanism and pricing proposals. Therefore, DRA will discuss in detail its proposals and how its recommended offsets should be applied under the appropriate captions below. In summary, DRA's proposed subsidy mechanism is described as follow:

- A benchmark zone for residential service be identified using Pacific's current rate for 1FR plus the EUCL.
- High cost areas are those areas whose TSLRIC is above the TSLRIC of the benchmark zone.

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19. March 25, 1996, Assigned Commissioner's Ruling Extending Procedural Schedule and Disposing of February 29, 1996 Emergency Appeal by Four Members of the California Telecommunications Coalition.
20. D.95-12-021, at 6.

- The amount of subsidy for a particular area is its TSLRIC minus the TSLRIC of the benchmark zone.
- Subsidies would be available in high cost areas for each residential line.
- Subsidies would be available to all carriers of last resort.
- The annual subsidies from the California high cost voucher fund for carriers of last resort should be offset by their annual revenues from the interstate USF and the interstate CCLC.

A. Objectives of the Subsidy Mechanism

30. For a subsidy mechanism, DRA believes that there should be a proper balance between maintaining a reasonable basic service rate for all Californians and minimizing the social burden of subsidizing basic services. DRA identifies the following objectives for the Commission's proposed high cost voucher fund:

- It should be competitively neutral;
- It should not be used to lower basic service rates for <u>all</u> Californians; and
- It should not function in a manner that would provide a guaranteed return on investments for the service providers.

B. Benchmark Zone and High Cost Areas

31. P.U. Code 739.3 requires the Commission to establish a fair and equitable local rate structure for small LECs serving rural and small metropolitan areas for the purposes of promoting universal service and reducing any disparity in the rates charged by all LECs. In compliance with this mandate, the Commission has, typically, been using Pacific's rates as benchmarks to set rates for high cost LECs. DRA developed a similar approach using Pacific's current 1FR rate as a reference to identify high cost areas where subsidies would be available to reduce rate disparity between high and low cost areas.

32. The CPM and HPM group the census block groups (CBGs) by density into seven and six zones, respectively. There are more than 20,000 CBGs in California. Grouping CBGs into a manageable number such as those presented in the CPM and HPM, and determining the amount of subsidies for each zone is reasonable and appropriate. DRA has analyzed the outputs of the CPM and found that the cost differences for the majority of the CBGs were by an increment of a penny. (Table 3.3.) This confirms that setting subsidies for each CBG is unnecessary and would be burdensome.

33. In selecting a benchmark zone, DRA proposes that the Commission use Pacific's existing 1FR rate plus the EUCL as a reference. Both CPM and HPM identified the cost of basic service based on total company costs. The sum of the 1FR rate and EUCL, or $14.75 for Pacific, is the amount that subscribers pay directly towards reimbursing the company's total costs of providing 1FR service. Therefore, DRA proposes that the benchmark zone be the zone having the highest TSLRIC that does not exceed $14.75. This criteria would ensure the maintenance of the existing 1FR rate, and also minimize the size of subsidies by not subsidizing residential lines whose costs are at or below Pacific's existing 1FR rate. If the TSLRICs of all zones exceed $14.75, DRA proposes that the zone with the lowest TSLRIC be set as the benchmark zone. This proposal would avoid subsidizing all customers in order to minimize the subsidy requirement, and at the same time would maintain basic service rates at a reasonable level.

34. The 1FR and the 1MR are comparable services. DRA does not recommend more favorable pricing treatment for either service. In order to treat 1FR and 1MR in an equitable manner, DRA recommends that the same benchmark zone be used to identify high cost areas and their subsidy amounts. Using the outputs of the CPM as an example, Zone-7 should be selected as the benchmark zone. Zone-7 which TSLRIC is ~~$12.65~~ $14.08 * is the zone having the highest TSLIRC not exceeding $14.75 (Table 3.4.) High cost

areas should be those zones in which the TSLRIC is above the benchmark zone. Again, using the CPM as an example, under DRA's proposal, high cost areas would include Zone-1 through Zone-6. (Table ~~3.3~~ 3.4.)

~~c. Price Floors and Price Ceilings~~

35. In D.96-03-020, the Commission re-classified basic exchange services to Category II effective March 31, 1996.[21] The Commission also maintained its current policy that Category II services are subject to flexible pricing rules with established floor and ceiling limits.[22] Therefore, DRA believes that the proxy cost model has a dual purpose. One purpose is to set the levels of subsidy ~~on a deaveraged basis~~ to ensure basic telephone service is available and affordable to all Californians. The other is to use the proxy cost results to set price floors of basic services for the incumbent LECs.

~~36. The Commission intends to rely on the OAND cost studies~~ to set price floors for the incumbent LECs.[23] DRA believes this is reasonable except for basic services. In the OAND-P, Pacific developed statewide average costs for its basic services, and GTEC developed its basic service costs for three density zones: high, medium, and low. Rather than requiring Pacific and GTEC to deaverage their OAND cost data and to deaverage them in some consistent manner, the Commission should refer to the proxy cost study, which has deaveraged data readily available, to set price floors of basic service for all incumbent LECs.

37. It is clear that the local exchange market is not sufficiently competitive.[24] The Commission should set floors ~~and ceilings between which the incumbent LECs may exercise their~~

21. D.96-03-020 at 54.
22. Id. at 56.
23. Id. at 56.
24. D.96-03-020 at 48.

~~pricing flexibility. DRA proposes that the price floors for low~~ cost areas be set at the respective TSLRICs developed in the proxy cost model. The price floors for the benchmark zone and high cost areas should be the TSLRIC of the benchmark zone. DRA's proposal of setting a price floor for basic service at the TSLRIC meets the Commission's adopted imputation rule which DRA will explain in detail in Section X.

38. The price ceilings should be established by adding a reasonable proportionate contribution towards recovery of LECs' shared and common costs. The amount of shared and common costs that LECs recover should be LEC-specific. The appropriate proceeding to address this particular issue is the upcoming ~~pricing phase of the OAND proceeding.~~ pricing. DRA intends to ~~elaborate~~ set forth its ~~price ceiling~~ proposal for basic service in its ~~May 15~~ June 14, 1996 testimony in the OAND proceeding.

D. High Cost Voucher Fund

39. DRA proposes that the high cost voucher fund provide subsidies to high cost areas for purposes of minimizing rate disparity between high and low cost areas and maintaining reasonable basic service rates for Californians. Subsidies for a respective zone would be calculated by the difference between its TSLRIC and the TSLRIC of the benchmark zone. (Table 3.4.) Under this proposal, carriers of last resort would be guaranteed a minimum revenue stream from basic services at the TSLRICs. DRA's proposal to subsidize basic service up to its TSLRIC rather than at the TSLRIC plus shared and common costs serves several purposes. First, it would require a smaller subsidy. Secondly, it would promote efficiency because firms that are more efficient would retain higher profits. Thirdly, carriers of last resort would not be guaranteed a recovery of their shared and common costs. These carriers must make their own pricing decisions regarding the amount of shared and common costs to be recovered from basic service in accordance with their assessment of the market.

E. Offsets to the Results of the Proxy Cost Model

40. The Commission-adopted proxy cost model would develop basic service costs based on total company costs as it does in the HCM and CPM. In recognition of jurisdictional separations and federal subsidies for the provision of basic service, three offsets are necessary to account for these federal funds. They are the EUCL, the interstate Universal Service Fund (USF) and the interstate carrier common line charge (CCLC). The EUCL is established by the FCC for recovery of a portion of the LEC's interstate non-traffic sensitive costs. It is assessed on ratepayers on a per line basis. Ratepayers pay the effective basic service rate and the EUCL for their subscription to basic service. The Commission has no control over the amount, nor the method of recovery of the EUCL. Therefore, ~~for the pricing flexibility exercise~~, DRA proposes that the Commission ~~require the LECs to include~~ include the subsidy amount. the EUCL in ~~the~~ setting ~~of the rates. That is, the sum of LEC's~~ effective rate and EUCL should not be lower than the price floor, and ~~their sum should not be higher than the price ceiling~~.

41. The total annual subsidies received by carriers of last resort from the California high cost voucher fund should be reduced by their revenues from the USF and the CCLC. The USF is established by the FCC to keep basic service rates affordable for high cost companies. It is currently available only to the LECs. The FCC is in the process of revamping the USF. Pursuant to the Telecommunication Act of 1996, the USF is expected to be extended to non-LECs.[25] The CCLC, which is assessed on interexchange carriers based on minutes of use, is another rate element established by the FCC for the recovery of a portion of the LEC's interstate non-traffic sensitive costs. The proxy cost model will develop costs of basic service based on total company costs. These offsets, the USF and CCLC, are therefore necessary in order

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25. The Telecommunications Act of 1996 at Section 254.

to avoid double-recovery of costs by the carriers of last resort. To account for the USF and CCLC, DRA proposes that all carriers of last resort include in their monthly statement filed with the Commission their USF and CCLC as reductions of their claim from the high cost voucher fund.[26] The covered period for the USF and CCLC should be identical to their monthly statements.

~~F. Pricing Flexibility and Deaveraging~~

42. From a policy standpoint, DRA believes that LECs should be allowed to flexibly price basic service between a price floor and a price ceiling established by the Commission. The LECs should also be allowed to exercise different degrees of pricing flexibility in accordance with market demand and competitive pressure in various geographic areas. Here is the framework of DRA's pricing flexibility proposal:

- LECs should be able to flexibly price basic services within the price floors and price ceilings established by the Commission.
- Price floors should be established using results of the Commission-adopted proxy cost model.

  For low cost areas, price floors should be set at their respective TSLRICs.

  For the benchmark and high cost areas, the price floors should be set at the TSLRIC of the benchmark zone.
- Price ceilings should be established by adding to the price floors a reasonable proportion of the shared and common costs.

  The amount of shared and common costs allocated to basic services for recovery should be LEC-specific and to be determined ~~in the OANP proceeding~~.

26. Proposed Rule 6.B.1, D.95-07-050.